



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANTS : Wagle et al.  
SERIAL NUMBER : 10/036,856 EXAMINER : Cybille Delacroix-Muirheid  
FILING DATE : December 31, 2001 ART UNIT : 1614  
FOR : METHODS FOR TREATING GLAUCOMA II B

**Mail Stop AF**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**DECLARATION OF HOWARD B. HAIMES UNDER 37 C.F.R. §1.132**

I, Howard B. Haimes, of 114 Woodland Street, Natick, MA, declare and state that:

1. I received Ph.D. degree in Biochemical Cytology from Sue Golding Graduate Division of the Albert Einstein College of Medicine, Yeshiva University, Bronx, NY and a M.S. in Biochemical Cytology from Sue Golding Graduate Division of the Albert Einstein College of Medicine, Yeshiva University, Bronx, NY and an M.S. degree in Biology from Long Island University, Brooklyn, NY and a B.S degree in Biology from Union College, Schenectady, NY .
2. I am presently employed by Alteon Inc., 6 Campus Drive, Parsippany, NJ 07054, the assignee of the above-referenced patent application. I have been employed by Alteon Inc. for 1 year.
3. I have reviewed the Final Office Action dated June 6, 2005. I understand that 1, 2 and 4-7 are rejected under 35 U.S.C. § 102(e), as being anticipated by Wagle et al., U.S. Patent Application Publication 2002/0022622 ("Wagle").
4. I have reviewed the present application in conjunction with the Wagle reference.
5. I disagree with the Examiner's assertion that Wagle discloses a method of treating diabetic retinopathy in a patient by administering 2,4,5-trimethylthiazole and therefore a decrease in

intraocular pressure or an improvement in ocular accommodation in the patient would be an inherent characteristic of the disclosed method

6. The eye constantly produces aqueous humor, the clear fluid that fills the anterior chamber (the space between the cornea and iris). The aqueous humor filters out of the anterior chamber through a complex drainage system. The delicate balance between the production and drainage of aqueous humor determines the intraocular pressure. Normal human intraocular pressure ranges between 8mm and 21mm Hg. Increased intraocular pressure indicates a problem with the amount of aqueous humor in the eye: either the eye is producing too much, or it's not draining properly. High intraocular pressure is a major risk factor for glaucoma. Glaucoma is an eye disorder that causes progressive and irreversible optic nerve damage and vision loss.

Although not everyone with intraocular pressure above 20mm Hg develops glaucoma, someone with the pressure over 20mm Hg is more likely to develop glaucoma than someone with a lower pressure. Also, there are some people who have an intraocular pressure below 20mm Hg who develop glaucoma, this is called normal tension glaucoma.

Depending on the type of glaucoma, various symptoms may be experienced. There is gradual loss of peripheral vision and night vision. Blurred vision and colored rings around lights accompany these symptoms. If intraocular pressure remains high, tunnel vision can develop.

Glaucoma Risk factors include age, race (African-Americans and persons of Japanese decent have a higher incidence of glaucoma), sex (females are high risk), family history and medical disorders (*e.g.*, presence of hyperopia or farsightedness, diabetes or previous eye injury). Although glaucoma cannot be cured, in most cases it can be successfully controlled. Glaucoma treatment entails decreasing aqueous humor production, increasing fluid drainage or a combination of the two, thereby decreasing intraocular pressure. Intraocular pressure treatment may be in the form of medication (*e.g.*, eye drops containing beta-blockers or alpha-2 agonists), laser therapy or surgery (*e.g.*, trabeculoplasty, trabeculectomy).

7. Diabetic retinopathy is a disorder of the retinal blood vessels resulting from diabetes.

Everyone who has diabetes is at risk for developing diabetic retinopathy, but not all diabetics do develop it. The incidence of diabetic retinopathy increases with the duration of diabetes. About 60% of patients having diabetes for 15 years or more will have some blood vessel damage in their eyes and a percentage of these are at risk of developing blindness. Patients with diabetic retinopathy are also at a greater risk of developing retinal tears and detachment.

In diabetic retinopathy, the small blood vessels that are in the retina are damaged and become leaky. New blood vessels can also grow in the back of the eye. These new vessels are abnormal and bleed easily, sometimes filling the back of the eye with blood. This causes the retina to swell and form deposits. The affect of diabetic retinopathy on vision varies widely, depending on the stage of the disease. Some common symptoms include blurred vision, floaters and flashes and sudden vision loss. Risk factors for diabetic retinopathy include high blood glucose, poor diet and lack of exercise.

Diabetic retinopathy is treated in many ways, depending on the stage of the disease and the specific problem that requires attention. The preferred method of treatment is laser photocoagulation to seal off leaking blood vessels and destroy new growth or in more extensive cases, vitrectomy. Many patients control their diabetes with diet and medication to delay or prevent the development of diabetic retinopathy and other complications.

Although diabetes and diabetic retinopathy are risk factors for increased intraocular pressure and glaucoma, not all diabetics or people suffering from diabetic retinopathy develop increased intraocular pressure or glaucoma. In fact, while most diabetics develop diabetic retinopathy over time, the same cannot be said for intraocular pressure and/or glaucoma. Specifically, the instant specification teaches that primary open angle glaucoma (the predominant form of glaucoma) occurs in approximately 4% of diabetics compared to 1.8% of the general population. *See*, page 1, lines 18-32.

8. I assert that one of ordinary skill in the art would readily recognize that the etiology, symptoms and treatment of glaucoma/increased intraocular pressure is quite different from that of diabetic retinopathy and would further recognize that while diabetics are twice as

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likely to develop glaucoma as compared to the general population, glaucoma is not a natural consequence that necessarily flows from diabetes or diabetic retinopathy.

9. I further declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001 and that willful false statements may jeopardize the validity of this application and any patent issuing therefrom.

  
Howard B. Haimes

Signed at Parsippany, NJ

this 6<sup>th</sup> day of October, 2005

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